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Committee on the Peaceful Uses of Outer Space
Scientific and Technical Subcommittee
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Draft report

II. United Nations Programme on Space Applications

1. In accordance with General Assembly resolution 69/85, the Subcommittee considered agenda item 4, "United Nations Programme on Space Applications".

2. At the 826th meeting, the Expert on Space Applications made a statement outlining the activities carried out and planned under the United Nations Programme on Space Applications.

3. The representatives of Canada, China, Colombia, Cuba, Germany, Japan, Republic of Korea, Saudi Arabia, the United States and Venezuela (Bolivarian Republic of) made statements under agenda item 4. A statement was also made under the item by the representative of Chile on behalf of the Group of Latin American and Caribbean States. During the general exchange of views, statements relating to the item were also made by observers for the Asia-Pacific Space Cooperation Organization (APSCO).

4. The Subcommittee heard the following scientific and technical presentations:

(a) "BRITE Constellation: two years in orbit", by representatives of Austria;

(b) "SpaceTech: a postgraduate master's degree programme in space systems and business engineering of the Graz University of Technology", by the representative of Austria;

(c) "Report of the new RCSSTEAP (China)", by the representative of China;

(d) "DropTES: a United Nations-Human Space Technology Initiative fellowship programme — report on the first cycle", by representatives of Germany;

(e) "Introduction of UNISEC-Global", by the representative of Japan;

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(f) "United Nations/Mexico Symposium on Basic Space Technology: making space technology accessible and affordable — a Mexican experience", by the representative of Mexico.

A. Activities of the United Nations Programme on Space Applications

5. The Subcommittee had before it the report of the Expert on Space Applications, outlining the mandate and orientation of the United Nations Programme on Space Applications (see A/AC.105/1085, paras. 2-11). The Subcommittee noted that the Programme for 2014 had been carried out satisfactorily and commended the work accomplished by the Office under the Programme.

6. The Subcommittee noted with appreciation the voluntary contributions, cash and in-kind, provided by various Member States and organizations for 2014 (see A/AC.105/1085, para. 53).

7. The Subcommittee noted that the priority areas of the Programme were environmental monitoring, natural resource management, satellite communications for tele-education and telemedicine applications, disaster risk reduction, the use of global navigation satellite systems, the Basic Space Science Initiative, space law, climate change and the Basic Space Technology Initiative.

8. The Subcommittee noted, that in 2015 the new thematic priority of monitoring and protecting biodiversity and ecosystems would be included in the Programme.

9. The Subcommittee noted that the Director of the Office for Outer Space Affairs and the Expert on Space Applications had informed it of the status of resources, including the impact of the reduction in the Office's human resources on the Programme. The Subcommittee noted that additional human resources were necessary to fully implement the range of activities to be conducted by the Programme and that without such an increase the Office would not be in a position to meet the increasing demands by Member States with respect to the sustainable development goals and the post-2015 development agenda.

10. Some delegations expressed concern that the Office's resources, in particular its human resources, were inadequate for the Office to continue implementing the full breadth of its mandate.

1. Year 2014

Meetings, seminars, symposiums, training courses and workshops

11. The Subcommittee had recommended the approval of the following programme of meetings, symposiums and workshops for 2014:

(a) United Nations Expert Meeting on the International Space Station Benefits for Health, held in Vienna on 19 and 20 February;

(b) United Nations/Morocco International Conference on the Use of Space Technology for Water Management, held in Rabat from 1 to 4 April;

(c) United Nations/Austria Symposium on Space Science and the United Nations, held in Graz, Austria, from 22 to 24 September;

(d) United Nations/International Astronautical Federation Workshop on Space Technology for Socioeconomic Benefits, held in Toronto, Canada, from 26 to 28 September;

(e) United Nations/Mexico Symposium on Basic Space Technology, held in Ensenada, Mexico, from 20 to 23 October;

(f) United Nations/China/Asia-Pacific Space Cooperation Organization Workshop on Space Law, held in Beijing from 17 to 20 November;

(g) United Nations/Abdus Salam International Centre for Theoretical Physics Workshop on the Use of Global Navigation Satellite Systems for Scientific Applications, held in Trieste, Italy, from 1 to 5 December.

Long-term fellowships for in-depth training

12. The Subcommittee expressed its appreciation to the Government and the Ministry of Industry of Italy, which, through the Politecnico di Torino and the Istituto Superiore Mario Boella and with the collaboration of the Istituto Elettrotecnico Nazionale Galileo Ferraris, had provided fellowships for the tenth master class on GNSS and related applications, which concluded in September and the eleventh class, which had begun in October 2014.

13. The Subcommittee expressed its appreciation to the Government of Japan for continuing the United Nations/Japan Long-Term Fellowship Programme on Nanosatellite Technologies in cooperation with the Kyushu Institute of Technology.

14. The Subcommittee expressed its appreciation to the Government of Germany, which, in collaboration with the Center of Applied Space Technology and Microgravity at Bremen University and the German Aerospace Center (DLR), had successfully conducted the first cycle of its drop tower experiment series.

2. Year 2015

Meetings, seminars, symposiums, training courses and workshops

15. The Subcommittee recommended the approval of the following programme of forums, meetings, symposiums and workshops for 2015:

(a) United Nations/Japan Workshop on Space Weather: Science and Data Products from International Space Weather Initiative Instruments, to be held in Fukuoka, Japan, from 2 to 6 March;

(b) United Nations/Russian Federation Workshop on the Applications of Global Navigation Satellite Systems, to be held in Krasnoyarsk, Russian Federation, from 18 to 22 May;

(c) United Nations/Austria Symposium on Integrated Space Technology Applications for Climate Change, to be held in Graz, Austria, from 14 to 17 September;

(d) United Nations/Islamic Republic of Iran Workshop on the Use of Space Technology for Dust Storm and Drought Monitoring in the Middle East Region, to be held in Tehran from 26 to 30 September;

(e) United Nations/South Africa Symposium on Basic Space Technology, to be held in Cape Town, South Africa, in September;

(f) United Nations/International Astronautical Federation Workshop on Space Technology for Socioeconomic Benefits, to be held in Jerusalem, Israel, from 9 to 11 October;

(g) United Nations/Costa Rica Workshop on Human Space Technology, to be held in San José from 9 to 13 November;

(h) United Nations/United Arab Emirates High-level Forum: Space as a Driver for Socioeconomic Sustainable Development, to be held in Dubai, United Arab Emirates, from 15 to 17 November;

(i) United Nations/Kenya Workshop on Space Technology and Applications for Wildlife Management and Protecting Biodiversity, to be held in Kenya in November;

(j) United Nations International Meeting on Global Navigation Satellite Systems, to be held in Vienna from 14 to 18 December.

B. Regional and interregional cooperation

16. The Subcommittee noted that the schedule of nine-month postgraduate courses for the period 2012-2014 offered by the regional centres for space science and technology education, affiliated to the United Nations, was annexed to the report of the Expert on Space Applications (A/AC.105/1085, annex III).

17. The Subcommittee noted the inauguration of the new regional centre for space science and technology education in Asia and the Pacific, located at Beihang University in Beijing. The Subcommittee also noted the commitment of the Government of China to supporting the work of the centre.

18. The Subcommittee recalled that the General Assembly, in its resolution 68/75, had emphasized the importance of regional and interregional cooperation in the field of space activities to assist States in the development of their space capabilities and contribute to the achievement of the goals of the United Nations Millennium Declaration, and had noted in that regard the importance of the equal participation of women in all fields of science and technology.

19. The Subcommittee noted that the twenty-first session of the Asia-Pacific Regional Space Agency Forum (APRSAF) had been held in Tokyo from 2 to 5 December 2014, on the theme "Leap to the next stage: delivering innovative ideas and solutions". The twenty-second session of APRSAF would be held in Bali, Indonesia, in 2015.

20. The Subcommittee also noted that the eighth meeting of the Council of APSCO had been held in Pakistan on 24 and 25 September 2014, at which it reviewed the progress made on APSCO projects.

21. The Subcommittee noted that the pro tempore secretariat of the Sixth Space Conference of the Americas was continuing the implementation of the Pachuca Declaration, adopted at the Sixth Conference, held in Pachuca, Mexico, from 15 to 19 November 2010.

22. The Subcommittee was informed of the in-cash contributions received from donors in past years, and member States were encouraged to further support the fulfilment of the objectives of the international community in supporting the development of capacity in space science and technology.

X. Use of nuclear power sources in outer space

23. In accordance with General Assembly resolution 69/85, the Subcommittee considered agenda item 12, "Use of nuclear power sources in outer space".

24. The representatives of China, the United States and Venezuela (Bolivarian Republic of), and the representative of Chile on behalf of the Group of Latin American and Caribbean States, made statements under agenda item 12. During the general exchange of views, statements relating to the item were also made by representatives of other member States.

25. The Subcommittee encouraged States and international intergovernmental organizations to begin or to continue implementing the Safety Framework for Nuclear Power Source Applications in Outer Space (A/AC.105/934).

26. The view was expressed that the Safety Framework would facilitate the conduct of missions involving nuclear power sources (NPS) on a bilateral and multilateral basis between States and international intergovernmental organizations. The delegation expressing that view was also of the view that the widespread implementation of the Safety Framework would provide assurance to the global community that NPS applications were being developed, launched and used in a safe manner.

27. The view was expressed that the Safety Framework, in its present form, was not adequate to meet the challenges posed by the use of NPS in outer space and that their proliferation in outer space, including in terrestrial orbits, should not be allowed, as the effects of NPS on humankind and the environment had not been assessed and there was no definite framework establishing responsibilities and introducing technical and legal tools that could effectively address critical situations that might arise because of improper practices.

28. The view was expressed that the Safety Framework provided a comprehensive and adequate foundation of guidance for member States and international intergovernmental space organizations to develop and operate their own space NPS applications in a safe manner. The delegation expressing that view was also of the view that adherence to the Safety Framework and the Principles Relevant to the Use of Nuclear Power Sources in Outer Space provided a high level of assurance that space NPS missions would be safe.

29. Some delegations expressed the view that Governments bore international responsibility for national activities involving the use of NPS in outer space conducted by governmental and non-governmental organizations and that the matter concerned all humanity.

30. The view was expressed that that there should be greater coordination and interaction between the Scientific and Technical Subcommittee and the Legal Subcommittee in order to develop binding legal instruments to define the

responsibility of States in the use of NPS in outer space and to undertake research on ways and means of optimizing or substituting for the use of nuclear energy in outer space activities.

31. The view was expressed that the use of NPS in outer space should be as limited as possible and that, while they were needed for some interplanetary missions, no justification existed for their use in terrestrial orbits, for which other sources of energy were available that were much safer and had been proved to be efficient.

32. Some delegations expressed the view that more consideration should be given to the use of NPS in terrestrial orbits in order to address the problem of potential collisions of NPS objects, as well as to their accidental re-entry into the Earth's atmosphere. Those delegations were of the view that more attention should be given to that matter through adequate strategies, long-term planning, regulations and the promotion of binding standards, as well as the Safety Framework for Nuclear Power Source Applications in Outer Space.

33. The view was expressed that States involved in the use of NPS in outer space should be encouraged to share, in technical presentations to the Subcommittee, their NPS safety experiences and best practices, as such sharing would substantiate national commitments to safety.

34. The view was expressed that the objectives of the Working Group's multi-year workplan should be in conformity with international law, the Charter of the United Nations and the United Nations treaties and principles on outer space, in particular the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies.

35. The view was expressed that all member States should be involved in the decision-making and the identification of issues and challenges associated with NPS applications and the Safety Framework and that that would ensure the success of the implementation of the Working Group's workplan. The delegation expressing that view was also of the view that all decisions of the Working Group should be strictly subject to the agreement of the Subcommittee.

36. Pursuant to General Assembly resolution 69/85, the Working Group on the Use of Nuclear Power Sources in Outer Space was reconvened under the chairmanship of Sam A. Harbison (United Kingdom). The Working Group held [...] meetings.

37. At its [...] meeting, on [...] February, the Subcommittee endorsed the report of the Working Group.